	Application No.	Applicant(s)
Notice of Allowability	10/646.757	YAMAMOTO ET AL.
	Examiner	Art Unit
	Patricia A. George	1765
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to 10/17/2005.		
2. X The allowed claim(s) is/are <u>1-12</u> .		
Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received:		
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Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
ldentifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
5. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attachment(s)		
1. ⊠ Notice of References Cited (PTO-892)		atent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ⊠ Interview Summary Paper No./Mail Dat	
 Information Disclosure Statements (PTO-1449 or PTO/SB/C Paper No./Mail Date 		
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🔀 Examiner's Stateme	ent of Reasons for Allowance
o. Siological Material	9. Other	
NADINE G. NORTON		
SUPERVISORY PATIENT EXAMINER		
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U.S. Patent and Trademark Office PTOL-37 (Rev. 7-05)

DETAILED ACTION

Response to Remarks

The amendment received, 17 October 2005, is acknowledged.

Drawings

The drawings were received on 17 October 2005. These drawings satisfy requirements formalized in office action of 15 July 2005, and objection to the drawings is withdrawn.

Claim Rejections - 35 USC § 112

Rejections of claims 1-4 and 6-8 are withdrawn because the amendment received, 17 October 2005, in combination with an examiner's amendment (below), satisfies requirements cited in office action of 15 July 2005.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. McKinley on November 2nd, 2005.

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The application has been amended as follows:

1. Term "small" and "thin" deleted in: claim 1, lines 9 (small), 11 (thin), 12 (thin and

small), 13 (small), and 14 (thin); and claim 2, line 2 (thin).

2. Typo correction: Claim 2, line 2, insert the word --said—after the term "wherein".

Response to Remarks

Applicants' arguments on page 6, filed on 17 October 2005, are persuasive with respect to the fact that U.S. Patent No. 6,864,172 to Noma et al. does not constitute prior art.

Allowable Subject Matter

Claims 1-12 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or suggest: step (d) forming a metal film on said first insulating layer; step (e) removing a portion of said first insulating layer between said metal film and small hole in order to expose said metal film to said hole, in conjunction with all other limitations in the claims. The closest prior art, U.S. Patent 6,239,495 to Sakui et al., does not disclose steps (d) and (e).

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Conclusion

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia (Patty) George whose telephone number is (571) 272-5955. The examiner can normally be reached on weekdays between 7:00am and 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PAG 11/05 Patricia A George Examiner Art Unit 1765

NADINE G. NORTON
SUPERVISORY PARE EXAMINER